



We
Do

BINBRAIN

MEMBERS OF LOY



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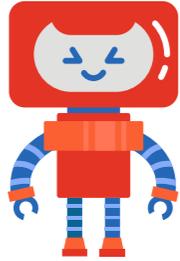
Ms. Sarah CHAN

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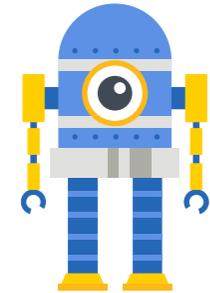


Mr. Maky NHEB

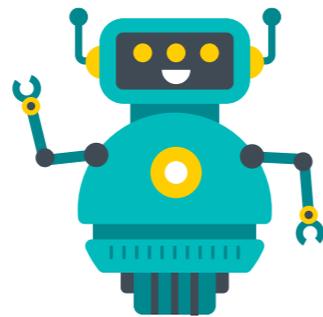
Member, Slide Maker



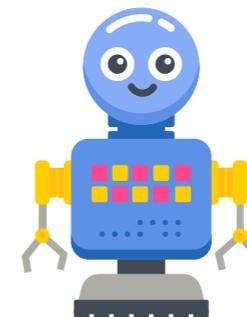
1. Overview of the project
project objective
Team role



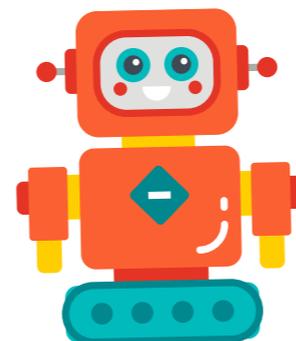
2. Functionality of the
project



3. Coding/flow
explanation



4. Demo and Future work



5. Question and
Answer

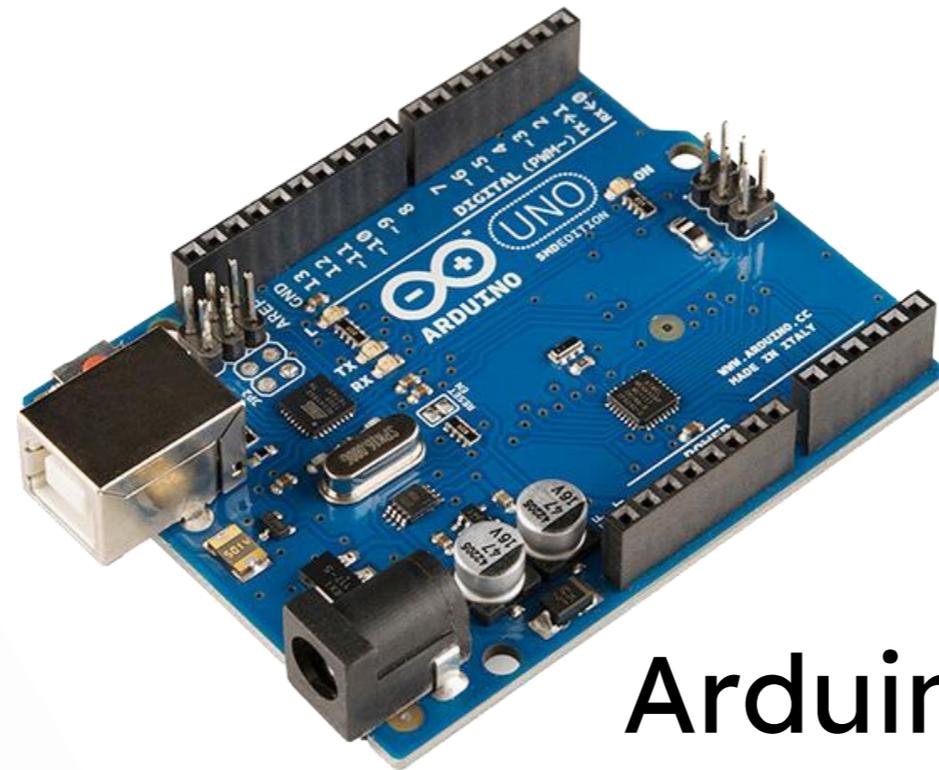
What is BinBrain?



Why do we create BinBrain?



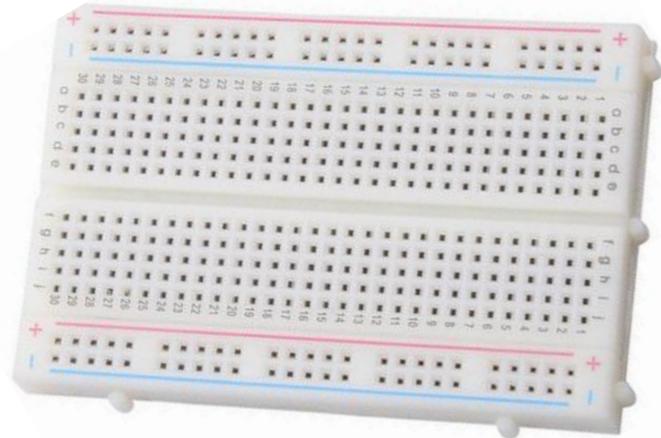
OBJECT SENSING OF BINBRAIN



Arduino



Ultrasonic
Module
Sensor



Bread board



Micro Servo



Battery 9v



9V battery Power plug

FUNCTIONALITY OF THE PROJECT



CODING AND EXPLANATION

1

```
#include <Servo.h>

Servo servo;
int trigPin = 5;
int echoPin = 6;
int servoPin = 7;
int led = 10;
long duration, dist,
average;
long aver[3];
void setup() {
  Serial.begin(9600);
  servo.attach(servoPin);
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  pinMode(led, OUTPUT);
  digitalWrite(led, LOW);
  servo.write(0);
  delay(100);
  servo.detach();
}
```

2

```
void measure() {
  digitalWrite(led, HIGH);
  digitalWrite(trigPin, LOW);
  delayMicroseconds(5);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);
  pinMode(echoPin, INPUT);
  duration = pulseIn(echoPin,
HIGH);
  dist = duration / 58.2;
}

void loop() {
  for (int i = 0; i <= 2; i++) {
    measure();
    aver[i] = dist;
    delay(10);
  }
```

3

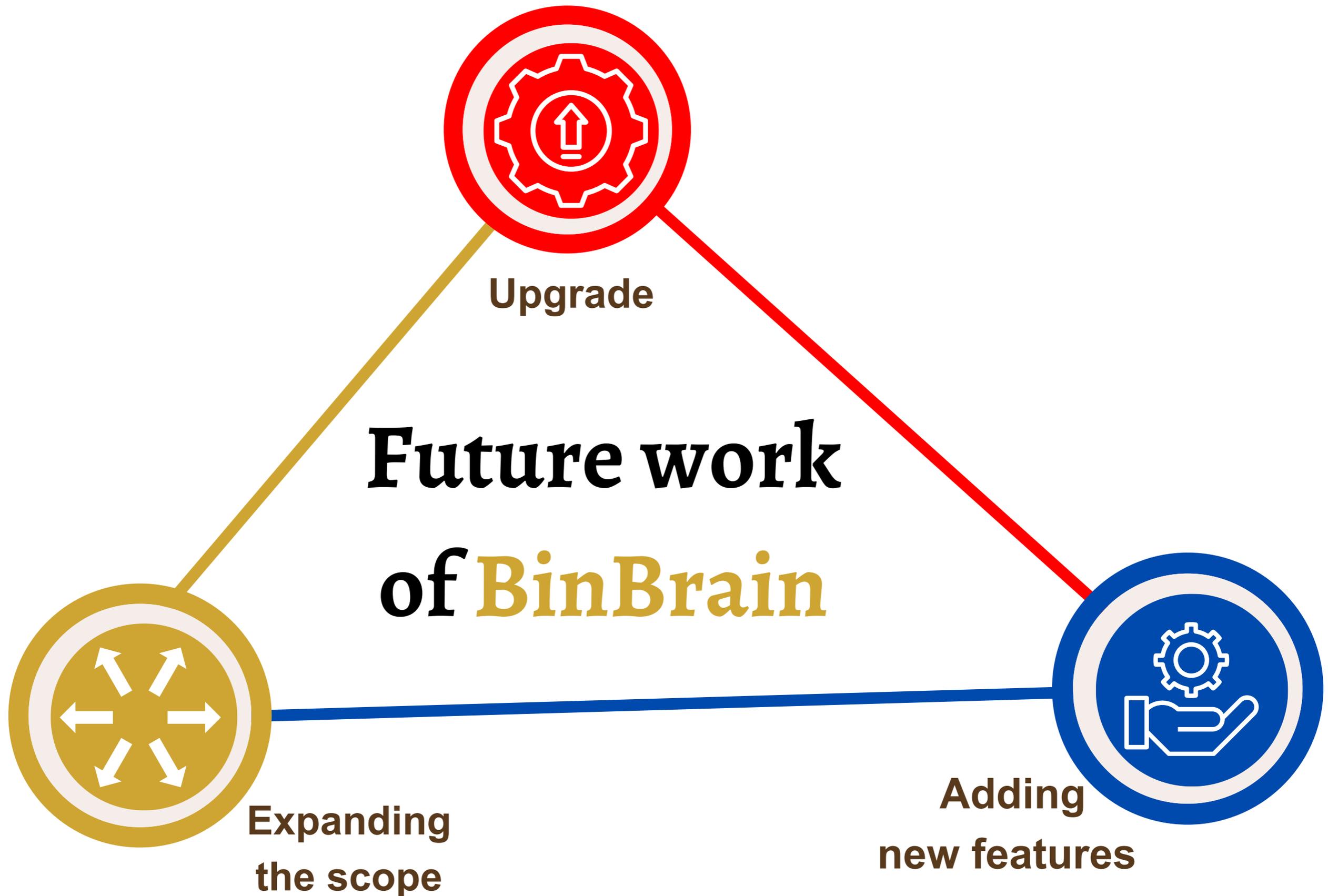
```
dist = (aver[0] + aver[1] +
aver[2]) / 3;

if (dist < 10) {
  servo.attach(servoPin);
  delay(1);
  servo.write(0);
  delay(5000); // delay for 5
seconds
  servo.write(150);
  delay(100);
  servo.detach();
}

digitalWrite(led, LOW);
Serial.print(dist);
Serial.println(" cm");
delay(500);
}
```

Let's go to **DEMO** part....!





**If you have any questions feel
free to ask...!**



THANKS YOU